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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/595,447  | 02/22/2007  | Reijo Pekkala        | P18714-US1          | 9831             |
| 27045   | 7590        | 07/26/2010           | EXAMINER            |                  |
| ERICSSON INC.<br>6300 LEGACY DRIVE<br>M/S EVR 1-C-11<br>PLANO, TX 75024 |             |                      | CHAI, LONGBIT       |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2431                |                  |
|   |             |                      | NOTIFICATION DATE   |                  |
|   |             |                      | 07/26/2010          | DELIVERY MODE    |
|   |             |                      |                     | ELECTRONIC       |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/595,447             | PEKKALA ET AL.      |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | LONGBIT CHAI           | 2431                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 12 July 2010.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-10 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-10 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 20 April 2006 is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

|  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____.   | 6) <input type="checkbox"/> Other: _____ .                        |

## **DETAILED ACTION**

1. Currently pending claims are 1 – 10.

### ***Response to Arguments***

2. In view of the remarks filed on 12 July 2010 in response to the Final Office action submitted on 12 May 2010, PROSECUTION IS HEREBY *REOPENED*. A new ground of rejection is set forth below for clarity purpose.

### ***Claim Objections***

3. Claim 1 is objected to because of the following informalities: “a telecommunication network ...” should be replaced with “a telecommunication network system having at least a gateway node, ...” because a network does not clearly fall into the categories of “process”, “machine”, “manufacture” and “composition of matter”. Appropriate correction(s) is (are) required.

4. Claim 8 objected to because of the following informalities: the claim is indicated as “Currently Amended” without any corresponding amendment for claim limitations.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 – 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over (3GPP TS 33.200 V5.0.0 Release 5 March 2002) hereafter referred as “3GPP-TS-33-200”, and in view of Loganathan et al. (U.S. Patent 7,536,183).

As per claim 1 and 6, 3GPP-TS-33-200 teaches a telecommunication network having at least a gateway node, with a first domain comprising:

**a mobile application part protocol instance connected to the gateway node (3GPP-TS-33-200: Figure 1’s Z<sub>r</sub>-interface and Page 8 Line 6 – 10 and see Loganathan below)**  
**configured to send and receive mobile application part messages in accordance with the 3<sup>rd</sup> Generation Partnership Project (3GPP) Technical Specification (TS) 33.200 (3GPP-TS-33-200: Section 4 and Section 5.5).**

3GPP-TS-33-200 teaches providing an interface (i.e. NE-NE Z<sub>r</sub>-interface) between two MAP network entities (NE) located at two different domains (3GPP-TS-33-200: Figure 1’s Z<sub>r</sub>-interface and Page 8 Line 6 – 10). However, 3GPP-TS-33-200 does not disclose expressly a MAP protocol gateway node.

**Loganathan teaches providing a MAP protocol gateway node (Loganathan: Figure 1 / Element 114 and Column 1 Line 39 – 50: Loganathan identifies the interworking problem in Mobile Application Part (MAP) that makes it difficult for mobile communications service providers to use more than one technology in their networks and provides an Inter Technology Bridge (ITB) (i.e. as a MAP protocol Gateway) to interface messages between these disparate MAP protocols.**

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Loganathan within the system of 3GPP-TS-33-200 because (a) 3GPP-TS-33-200 teaches the MAP network entities (NE) between two different

domains can be managed by a NE-NE Z<sub>r</sub>-interface which applies to all MAPsec inter-PLMN transactions (3GPP-TS-33-200: Figure 1's Z<sub>r</sub>-interface and Page 8 Line 6 – 10) and (b) Loganathan identifies the interworking problem in Mobile Application Part (MAP) that makes it difficult for mobile communications service providers to use more than one technology in their networks and provides an Inter Technology Bridge (ITB) (i.e. as a MAP protocol Gateway) to interface messages between these disparate MAP protocols (Loganathan: Figure 1 / Element 114 and Column 1 Line 39 – 50).

**the gateway node being connected to a second domain, wherein the gateway node is adapted to receive a mobile application part message from the first domain, to convert the received mobile application part message obtaining a secured mobile application part message, and to send the obtained message to the second domain** (Loganathan: Figure 1 / Element 114 & Column 4 Line 49 – 57 and Column 1 Line 39 – 50: translating / converting a MAP message to a more secured GSM MAP message), **the gateway node further being configured to receive a secured mobile application part message from the second domain, to extract an unsecured mobile application part message from the received secured mobile application part message and to send the extracted message towards the first domain** (Loganathan: Figure 1 / Element 114 & Column 4 Line 49 – 57 and Column 1 Line 39 – 50).

As per claim 2 and 7, 3GPP-TS-33-200 as modified teaches the gateway node performs a selective discarding of mobile application part messages received from the first domain and destined for the third domain and a selective discarding of mobile application part messages received from the third and destined for the first domain (3GPP-TS-33-200: Page 20 / Figure 1 & Item# 1(c) and Page 22 / 1<sup>st</sup> – 2<sup>nd</sup> Para: the MAP message is aborted / discarded for

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communications as security required) & (Loganathan: Figure 1 / Element 114 & Column 4 Line 49 – 57 and Column 1 Line 39 – 50).

As per claim 3 and 8, 3GPP-TS-33-200 as modified teaches the gateway node performs as a firewall towards the third domain (3GPP-TS-33-200: Page 20 / Figure 1 & Item# 1(c) and Page 22 / 1<sup>st</sup> – 2<sup>nd</sup> Para: a gateway network entity to abort / discard the message as security required is indeed qualified as a firewall between domains) & (Loganathan: Figure 1 / Element 114 & Column 4 Line 49 – 57 and Column 1 Line 39 – 50).

As per claim 4 and 9, 3GPP-TS-33-200 as modified teaches the gateway node is connected to different domains, and levels of security are configurable for the different domains (3GPP-TS-33-200: Page 6 / Line 9 –11, Page 11 / Section 5.5: MAPsec inter-domain security management by a gateway network entity between two PLMNs using different configurable security modes) & (Loganathan: Figure 1 / Element 114 & Column 4 Line 49 – 57 and Column 1 Line 39 – 50).

As per claim 5 and 10, 3GPP-TS-33-200 as modified teaches for a particular domain a fallback to a lower level of security than the configured level of security for the particular domain is allowable and allowing the fallback to the lower level of security is configurable for one domain independently from a configuring of an allowing of a respective fallback to a lower level of security level for another domain (3GPP-TS-33-200: Page 9 Line 7 – 9, Section 5.3 / 3<sup>rd</sup> Para and Page 22 / 1<sup>st</sup> Para). As per claim 2 and 7, 3GPP-TS-33-200 teaches the gateway node performs a selective discarding of mobile application part messages received from the first domain and destined for the third domain and a selective discarding of mobile application part

messages received from the third and destined for the first domain (3GPP-TS-33-200: Page 20 / Figure 1 & Item# 1(c) and Page 22 / 1<sup>st</sup> – 2<sup>nd</sup> Para: the MAP message is aborted / discarded for communications as security required) & (Loganathan: Figure 1 / Element 114 & Column 4 Line 49 – 57 and Column 1 Line 39 – 50).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LONGBIT CHAI whose telephone number is (571)272-3788. The examiner can normally be reached on Monday-Friday 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Longbit Chai/

Longbit Chai E.E. Ph.D  
Primary Examiner, Art Unit 2431  
7/20/2010

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